



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,998	04/12/2005	Ulrich Kessler	112701-607	2162
29157	7590	05/28/2009		
K&L Gates LLP P.O. Box 1135 CHICAGO, IL 60690			EXAMINER WEIER, ANTHONY J	
			ART UNIT 1794	PAPER NUMBER
			NOTIFICATION DATE 05/28/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

chicago.patents@klgates.com

Office Action Summary

Application No.

10/530,998

Applicant(s)

KESSLER, ULRICH

Examiner

Anthony Weier

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-17 and 19-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. This application contains claims 3 and 18 drawn to an invention nonelected with traverse in the reply filed on 7/15/08. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 6, 8, 10, 15- 17, 21-23, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darbyshire et al taken together with Eldred and French 1600708.

Darbyshire et al discloses a coffee tablet (inherently of a three dimensional shape) containing internal and surface pores, same having attained, in part, such porosity due to injection of air into the liquid pre-form of the tablet and wherein the finished tablet has a size sufficient to prepare a coffee beverage by dissolving in hot water. Darbyshire et al further discloses said coffee tablet containing additional components including, for example, creamer (Examples 3 and 5).

The claims call for the surface of the tablet to be smooth. It should be

Art Unit: 1794

first noted that it is well known to impart a smooth surface to a tablet by providing a molding surface that is smooth as taught, for example, in Eldred (col. 5). It would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the tablet of Darbyshire et al to include a smooth surface as a matter of preference in product aesthetics.

The claims further call for the tablet surface having a closed surface pore structure. It is well known to coat the surface of tablets to protect against shock and humidity as taught, for example, by French 1600708. It would have been further obvious to have employed such coating in the tablet of Darbyshire et al to provide such protection. As a result of such protective coating, the surface pores would be closed as called for in the instant claims.

The claims further call for the particular range of pore sizes within said tablet. Such determination would have been well within the purview of one skilled in the art and taking into account the disclosure of Example 3 in Darbyshire et al, it would have been further obvious to have arrived at such values through routine experimental optimization balancing the strength of the pellet with ability to dissolve.

Darbyshire et al further discloses 71% overall porosity (col. 7, lines 50-52) but is silent regarding the particular density called for in the instant claims. Eldred further teaches the preparation of coffee tablets having a high degree of porosity (e.g. 700 g/l) as called for in the instant claims. It would have been obvious to one having ordinary skill in the art at the time of the invention to have adopted a coffee tablet having such degree of porosity to provide for

Art Unit: 1794

advantageous dissolution of same (col. 6, lines 46-70).

The claims further call for the particular shape of the tablet. However, such determination would have been well within the purview of a skilled artisan, and it would have been further obvious to have prepared said tablet in any shape including a disc shape, for example, as a matter of aesthetic preference.

4. Claims 11-14, 24-28, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darbyshire et al taken together with Eldred, French 1600708, and GB 413488.

The claims further call for said coffee tablet being packaged in a material that comprises a moisture resistant material which would provides protection from loss of coffee aroma. GB 413488 teaches packaging coffee tablets for use in beverages in a material such as metal foil or lacquered wood pulp material, wherein said packaging is hermetically sealed with an inert gas (thus inherently protecting the loss of aroma and the unwanted permeation of moisture). It would have been obvious to one having ordinary skill in the art at the time of the invention to have packaged the coffee tablets in such way for the protective/aroma retaining advantages of GB 413488 (see page 2, lines 8-23).

The claims further call for said packaging material to comprise a flexible laminate of at least two layers which is substantially impervious to permeation of gas or moisture. GB 413488 teaches such flexible laminate by way of, for example, the metal foil (inherently containing more than one layer) wherein same is sealed and protects the tablets from permeation of both water and air as one of the important issues discussed in GB 413488 to avoid the presence of oxygen in

Art Unit: 1794

said packaging (see page 2, lines 8-23). GB 413488 also teaches the use of paper as a packaging material (page 2, lines 104-120). It would have been further obvious to have employed such packaging materials as a matter of preference depending on, for example, what material is available as well as comparison of the associated costs of same.

5. Claims 4 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darbyshire et al taken together with Eldred, French 1600708, and CA 964074.

The claims further call for said tablet having been prepared using a partial freezing step into a slush followed by molding of same. CA 964074 teaches preparation of coffee tablets using a semi-solid, slush step followed by full freezing wherein same provides a variety of advantages including better porosity (inherently an improvement in dissolution) and a shape which promotes good freeze-drying efficiency (page 2). It would have been obvious to one having ordinary skill in the art at the time of the invention to have prepared the tablet in such manner to provide product characteristics having the advantages as set forth in CA 964074.

6. Claims 5, 7, 9, and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darbyshire et al taken together with Eldred, French 1600708, CA 964074, and Weisman.

The claims further call for said tablet to be coated using a coffee extract at a certain concentration and wherein said tablet has an aroma provided in said coating. Weisman teaches coating coffee granules with coffee extract to protect

Art Unit: 1794

the flavor and prevent oxidation of same without employing expensive packaging. It would have been obvious to one having ordinary skill in the art at the time of the invention to have employed coffee extract in the coating to provide not only protection but added flavoring (and aroma). As for the particular concentration of such coating, it would have been further obvious to have arrived at same as a result effective variable (i.e. the more concentrated, the more flavor imparted).

Applicant's Arguments

7. Applicant's arguments filed 2/20/09 have been fully considered but they are not persuasive.

Applicant argues that Darbyshire, Eldred, and FR '708 are silent regarding coffee tablets having an internal pore structure wherein a majority of the pores are interconnected and have a size of between 5 and 50 micrometers as called for in the instant claims. Applicant further argues that Darbyshire discloses the size of the individual particles as being 0.4 and 0.9 mm which will result in interstitial voids considerably larger than the 5 to 50 microns. However, Applicant has not provided evidence that this would be so. Clearly, during compression of the particles during the molding step, the spaces between said particles are expected to be greatly reduced. Nevertheless, it should be noted that Applicant draws on the particle sizes of a single Example. It is clear that this is merely illustrative of the particle sizes that may be used. In other words, the disclosure of Darbyshire et al does not appear to restrict the size of the particles to be treated. Taking into account the data set forth in the examples including

Art Unit: 1794

pressure, relative porosity, powder density, and gas content of the material treated, it would have been obvious to one having ordinary skill in the art at the time of the invention to have arrived at the claimed values through routine experimental optimization balancing the strength of the tablet with its ability to dissolve.

Applicant argues that Darbyshire, Eldred, and FR '708 failed to suggest to teach the method step of molding a coffee composition that contains coffee solids while adding a gas thereto. Examiner disagrees. Darbyshire et al is silent regarding molding the coffee powder in an air free environment. It is inherent, therefore, during the compression of the coffee powder particles during molding that any air present would naturally be included in the tablet thus formed. In addition, Darbyshire et al discloses an embodiment wherein powder with previously added gas is added to other powders during tablet molding thus adding gas to the tablet whole during molding (col. 4, lines 52-68).

Applicant argues that none of the cited references suggests a process wherein coffee tablets may be formed by injecting a gas into a partially frozen coffee composition during molding. It should be noted that the instant claims do not appear to call for "injecting a gas" but merely require "adding a gas" (see claim 15). Applicant is directed to consider the rejection of claims with the teaching of CA 964074. In summary, CA 964074 teaches the advantages of molding a coffee tablet under semi-frozen conditions.

All other arguments are addressed in view of the rejections as set forth above.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Weier whose telephone number is 571-272-1409. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anthony Weier
Primary Examiner
Art Unit 1794

/Anthony Weier/
Primary Examiner, Art Unit 1794

Anthony Weier
May 22, 2009